

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims:

1. (Original) A composting system incorporating a vertical insulated composting tower with one or more chambers, the base of each chamber being fitted with a plenum and grate through which air is induced and output is daily removed.
2. (Original) A composting system as claimed in claim 1 wherein operation is continuous and operates on a plug flow principle using controlled shrinkage of biomass materials during their descent through the vertical chamber.
3. (Currently Amended) A composting system as claimed in claim 1 ~~or claim 2~~ wherein a second chamber if included is used for compost maturation and operates in the same manner as the first chamber.
4. (Original) A composting system as claimed in claim 3 which is of modular configuration with units which can be run in parallel or series with one feed system.
5. (Currently Amended) A composting system as claimed in ~~any one of the preceding~~ claim[[s]] 1 wherein the base of each chamber is fitted with a plenum and grate system to control air injection and removal of daily output.
6. (Currently Amended) A composting system as claimed in ~~any one of the preceding~~ claim[[s]] 1 wherein retained pile energy induces air intake above stoichiometric levels.
7. (Currently Amended) A composting system as claimed in ~~any one of the preceding~~ claim[[s]] 1 which a naturally induced excess air rate and evolved gas is controlled by a

fan with integral condenser/scrubber for condensate removal and odour control assurance.

8. (Currently Amended) A composting system as claimed in ~~any one of the preceding~~ claim[[s]] 1 wherein the insulated composting tower incorporating the thermic pile is held clear of the ground, freely allowing air induction through the base of the tower at rates close to the metabolic requirement of the bacteria in the pile.

9. (Original) A composting system as claimed in claim 8 wherein the composting tower is mounted on a plinth, open-ended supporting structure or over an open cavity.

10. (Currently Amended) A composting system as claimed in ~~any one of the preceding~~ claim[[s]] 1 which is weather sealed and vermin proof.

11. (Currently Amended) A composting system as claimed in ~~any one of the~~ claim[[s]] 3 [[to 10]] which is modular so that one chamber feeds another for purposes of compost maturation.

12. (Currently Amended) A composting system as claimed in ~~any one of the preceding~~ claim[[s]] 1 which includes a gated walking floor or other discharge mechanism which passes material down from processing in a controlled daily cycle.

13. (Original) A method of composting biodegradable waste material utilising a plug flow principle including:

- inducing low air flow rates through a compost pile using column energy;
- utilising high temperature pyro/thermophilic micro-organism activity in the compost pile;
- retaining pile energy above stoichiometric levels by controlling the induced air flow;
- utilising evolved gas extraction in the compost pile;
- maintaining constant biofilm maintenance by combined anaerobic/aerobic operation; and
- removing the biomass material at regular intervals.

14. (Original) A method as claimed in claim 13 which includes retaining a naturally induced excess air rate and evolved gas by controlling by a fan with integral condenser/scrubber for condensate removal and odour control assurance.
15. (Currently Amended) A method as claimed in claim 13 ~~or claim 14~~ wherein the biomass material requires no agitation.
16. (Currently Amended) A method as claimed in ~~any one of claim~~[[s]] 13 [[to 15]] including the step of maintaining an active moisture bound biofilm from input to output (typically 45-50% w/w) which prevents the possibility of pyrolysis and encourages microbe activity.
17. (Currently Amended) A method as claimed in ~~any one of claim~~[[s]] 13 [[to 15]] wherein the low air flow reduces the cooling effect of incoming air in the bottom layers giving high efficiency for effective working heights.
18. (Currently Amended) A method as claimed in ~~any one of claim~~[[s]] 13 [[to 17]] and substantially as hereinbefore described.
19. (Original) A composting system as claimed in claim 1 and substantially as hereinbefore described with reference to the accompanying drawings.